cut: shallow water of Prospect Reservoir, Prospect, September 1, 1912, A. E. Blewitt, no. 1549; Middlebury, August 28, 1896, W. M. Shepardson; shallow water and shores of Lake Quinnipaug, North Gilford, August 19, 1906, G. H. Bartlett; New Haven, September 16, 1879, J. A. Allen; Lake Saltonstall, September 23, 1880, E. \& C. E. Faxon. New York: rocky shore of Bowman's Pond, Sandlake, Rensselaer County, July and August, 1868 (?), C. H. Peck (duplicate type of E. Clintoniana Peck); lake, Averill Park, Rensselaer County, September, 1883, J. H. Wibbe; submerged in shallow water, sandy bottom of White Lake, Forestport, Oneida County, July 22, 1904, Haberer, no. 2741; Albany, A. Gray; shores of Lake Mahopac, Putnam County, August, 1898, J. Carey; Long Island, J. Torrey. New Jersey: pond near Milton, Morris County, August 2, 1904, C. S. Williamson; north shore of Spring Lake, Monmouth County, September 15, 1907, C. S. Williamson; in water, shore of Maxon's Pond, Point Pleasant, Ocean County, July 7, 1910, Van Pelt \& Brown, no. 271; Bay Head, Ocean County, August 8, 1908, E. B. Bartram; Toms River at Island Heights, August 19, 1892, J. R. Churchill; margin of Delaware above William Cooper's Ferry, S. N. Conrad; shores of Delaware, Camden, September, 1877 (mixed with E. americana) Martindale. Pennsylvania: banks of the Delaware overflowed by the tide, West Kensington, July, 1817 (?) Nuttall (type of Crypta minima); tidal mud about the mouth of the Schuylkill and Tinicum, Delaware County, August 2, 1865 (material mixed with E. americana), C. E. Smith. Maryland: sandy shores of Wicomico River near Salisbury, September, 1863, October, 1864, Canby. Virginia: Alexandria, A. H. Curtiss. Minnesota: Linn Lake, Chisago County, August, 1872, B. C. Taylor.

Gray Herbarium.

## A NEW AGROPYRON FROM CAPE BRETON.

## F. Tracy Hubbard.

Agropyron acadiense, sp. nov. Glaucissimum, stoloniferum; rhizomata squamigera pallide brunnea. Culmi solitarii vel pauci, glabri, $2-6.5 \mathrm{dm}$. alti, nodis (3) valde constrictis flexilibusque; innovationes duae vel plures, culmis molto breviores. Vaginae basilares plures, glabrae, nonnullae elaminatae; illae culmorum laeves glabraeque marginibus aliquando breve ciliatis exceptis, inferiores purpureorosae internodia circum aequantes vel etiam ea (saltem apud innovationes) superantes, superiores internodiis breviores, ad oram laminae
vaginis auriculatis angustiores. Ligulae circa 0.5 mm . longae, membranaceae erosaeque. Laminae e basi plus minus planato involutae, $5-16 \mathrm{~cm}$. longae, basi ad 3 mm . latae, valde patentes rigidaeque, infra glabrae laevesque, supra in nervis scabrae marginibus praecipue basin versus barbulatis. Inflorescentia compacta e vagina superiore plus minus exserta, aliquando a folio subtendente superata, 4-8.5 cm . longa ad 1 cm . lata; rachi internodiis superioribus exceptis fere glabro. Spiculae $1.2-1.5 \mathrm{~cm}$. longae, lateraliter compressae, paullum divergentes, 3 - 5 -florae; glumae duas tertias spiculorum longitudine aequantes, glabrae, inferior 7 -nervata, circa 8 mm . longa, carina apicem acutiusculum versus barbulata, superior 5 -nervata, circa 9 mm . longa, carina apicem acutiusculum vel minute mucronulatum versus barbulata; lemmata glabra, 5 -nervata, ad apicem in subulam ad 4 mm . longam dorso barbulatam abrupte contracta, circa 1-1.2 cm . longa; paleae 2 -carinatae carinis barbulatis, quam lemmata breviores, ad apicem minute ciliolatae, truncatae paullum retusatae.

Very glaucous with a long, scaly, pale brown rootstock: culms solitary or few to a clump, 2-6.5 dm. tall, 3 -noded, glabrous; nodes much constricted and flexible when fresh; innovations two to several, much shorter than the culms; basal sheaths several, glabrous, some of them bladeless; those of the culms smooth and glabrous except the sometimes short-ciliate margins, the lower purplish-pink, about equalling or exceeding the internodes (those of the innovations longer than the internodes), the upper shorter than the internodes, all auriculate and contracted to the blade at the throat: ligules about 0.5 mm . long, membranaceous and erose: , blades involute from a flattened base, $5-16 \mathrm{~cm}$. long, 3 mm . broad at base, strongly spreading and rigid, lower surface glabrous and smooth, upper surface scabrous on the nerves, margins barbulate especially toward the base: inflorescence compact, more or less exserted from the upper sheath, sometimes exceeded by the subtending leaf, $4-8.5 \mathrm{~cm}$. long, up to 1 cm . broad, the rachis almost glabrous except the upper internodes which are slightly barbulate: spikelets $1.2-1.5 \mathrm{~cm}$. long, laterally compressed, slightly divergent, 3-5-flowered; glumes about $\frac{2}{3}$ as long as the spikelets, inferior 7 -nerved, about 8 mm . long, barbulate on the keel toward the acutish apex, superior 5 -nerved, about 9 mm . long, barbulate on the keel toward the acutish or minutely mucronulate apex; lemmas glabrous, abruptly narrowed to a subulate tip which is up to 4 mm . long and barbulate dorsally, about 1-1.2 cm. long; paleas 2 -keeled, with the keels barbulate, shorter than the lemmas, truncate and slightly notched at the minutely ciliolate apex.-Nova Scotia: dry sandy beach of Bras d'Or Lake, Grand Narrows, Cape Breton, July 20, 1914, Fernald \& St. John in Plantae Exsiccatae Grayanae (TyPe in Gray Herb.), also Grand Narrows, July 27, 1898, John Macoun, Herb. Geol. Surv. Can. no. 21,030, distributed as $A$. occidentale.

Allied to A. Smithii Rydb. from which it differs in the constricted and flexible nodes of the culm, the more involute blades which are
never more than scabrous above, the almost wholly glabrous rachis, the fewer-flowered and smaller spikelets and in the glumes which are acutish or short-mucronulate instead of acuminate. It also somewhat resembles $A$. pungens (Pers.) R. \& S. from which it differs in the narrower, more involute and slightly shorter leaves, the less dense and not four-sided inflorescence and the fewer-flowered, somewhat less compressed spikelets.

## Boston, Massachusetts.

## A NEW JUNCUS FROM CAPE COD.

## M. L. Fernald.

Juncus pervetus, n. sp., radicibus, rhizoma, culmis et foliis ut apud J. Roemerianum; culmis teretibus vel compressis rigidis rectis vel tortis $0.6-1 \mathrm{~m}$. altis; inflorescentiis terminalibus vel pseudolateralibus supra compositis $2.5-10 \mathrm{~cm}$. longis $2.5-6.5 \mathrm{~cm}$. diametro, ramis rigide adscentibus vel divergentibus; capitulis 10 -30-floris subsphaericis segregatis; floribus circa 2 mm . longis interdum unisexualibus; sepalis petalisque subaequalibus pallide fuscis vel albescentibus oblongis obtusis membranaceo-marginatis, sepalis subcarinatis; staminis 6 interdum abortivis, filamento antheram aequante; fructo exserto 3 mm . longo ovato-prismatico subulato-attenuato nitido stramineo vel rufescente, placentis non crassatis; seminibus $0.4-0.6$ longis anguste obovoideis apice obtuse mucronatis basi breviter albido-caudatis.
Roots, rhizome, culms and leaves as in J. Roemerianus: culms terete or compressed, rigid, erect or twisted, $0.6-1 \mathrm{~m}$. high: inflorescences terminal or falsely lateral, much branching, $2.5-10 \mathrm{~cm}$. long, 2.5-6.5 cm . in diameter; branches rigid, ascending or divergent: heads $10-$ 30 -flowered, subspherical, scattered: flowers about 2 mm . long, sometimes unisexual: sepals and petals subequal pale-fuscous or whitish, oblong, obtuse, with membranaceous margins; sepals somewhat carinate: stamens 6 , sometimes wanting; filaments equaling the anthers: fruit exserted, 3 mm . long, ovate-prismatic, subulate-attenuate, shining, stramineous or rufescent; the placentae not thickened: seeds $0.4-0.6 \mathrm{~mm}$. long, narrowly obovoid, bluntly mucronate at apex, with a short white caudate appendage at base.-Massachusetts: brackish swale, Hyannis, August 29, 1909, E. W. Sinnott (distributed as $J$. articulatus, var. obtusatus); forming a dense swale for a few rods only at the peaty upper border of a brackish marsh, east side of Lewis Bay, Yarmouth, October 14, 1916, M. L. Fernald \& F. K. Butters, no. 15,064 (TYPe), also in Plantae Exsiccatae Grayanae.

